

A REVISION OF THE FUR MITES MYOBIIDAE (ACARINA)

(suite)

By Charles D. RADFORD, Hon. D. Sc., F. Z. S.

(MEMBRE CORRESPONDANT DU MUSÉUM D'HISTOIRE NATURELLE, PARIS)

Myobia longa Ewing, 1938.

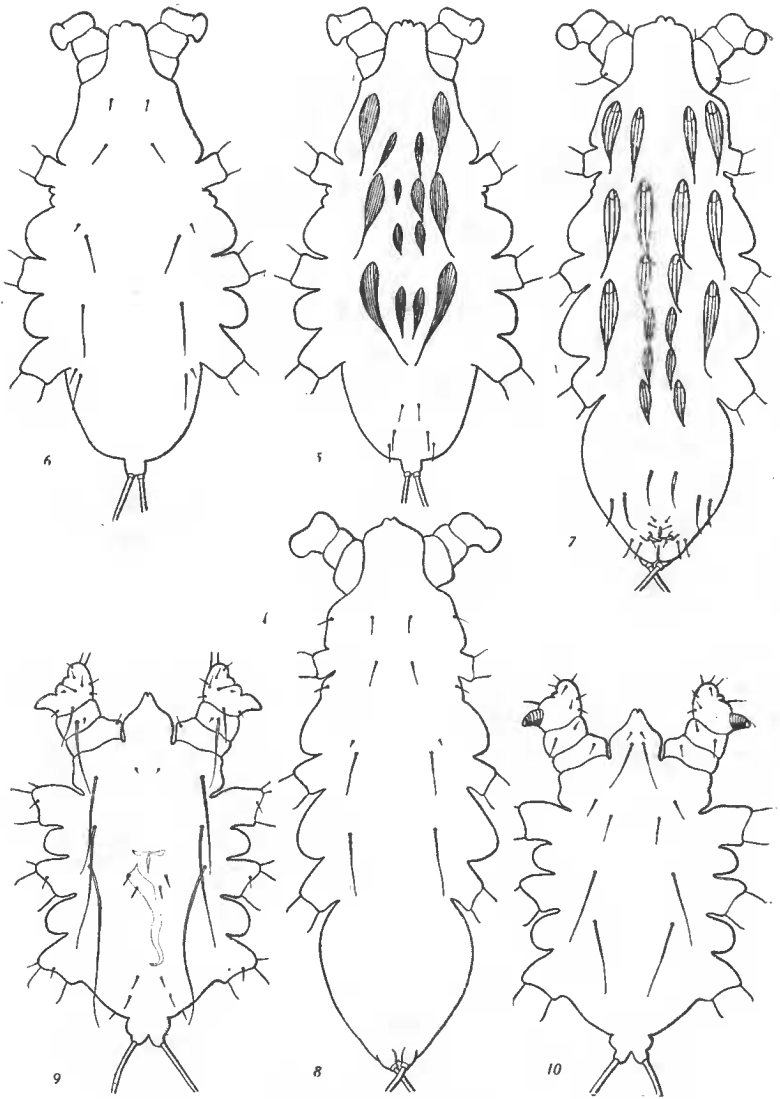
Myobia longa Ewing, 1938 *Proc. ent. Soc. Wash.* **40** : 7, 195.

The male dorsum (fig. 5) has the lateral spines I placed close to posterior edge of coxae I, expanded at base, striated, tapering to a long point ; lateral spines II level with coxae II, sub-similar to lateral spines I ; lateral spines III level with coxae III, expanded at base, their long, slender tips extending beyond posterior edge of coxae IV. Sub-median spines I anterior to coxae II ; sub-median spines II level with coxae II, not equal in size — one being approximately half the size of the other ; sub-median spines III lying between coxae II and III ; sub-median spines IV level with posterior edge of coxae III ; sub-median spines V, VI and VII simple, short and placed anterior to the terminal bristles.

The male venter (fig. 6) has two pairs of simple spines anterior to coxae II, the posterior pair about twice as long as anterior ; a pair of long spines is placed midway between coxae II and III, flanked laterally by a pair of smaller spines ; posterior to coxae III is a pair of long, stout spines extending to posterior edge of coxae IV ; posterior to coxae IV is a pair of long spines with a pair of small spines laterally.

Tarsus II with a short claw ; tarsus III and IV each having a long claw.

The female dorsum (fig. 7) has the lateral spines I expanded, placed close to posterior edge of coxae I their distal ends posterior to coxae II ; lateral spines II posterior to coxae II, extending to posterior edge of coxae III, not as broad as lateral spines I ; lateral spines III slightly longer than II and level with coxae III. Sub-median spines I slightly posterior to lateral spines I, narrower, extending beyond coxae II ; sub-median spines II posterior to coxae II, extending to coxae III, broader than the other dorsal spines ; sub-median spines III level with anterior edge of coxae III ; sub-median spines IV and V subequal, lying between coxae III and IV ; sub-median spines VI larger than IV and V, lying between coxae IV. Anterior



Myobia longa Ewing, 1938.

FIG. 5, ♂ dorsum. — FIG. 6, ♂ venter. — FIG. 7, ♀ dorsum; — FIG. 8, ♀ venter.

Myobia simplex Ewing, 1938 ♂

FIG. 9, dorsum. — FIG. 10, venter.

to the genital pore there are six long, stout spines arranged in two posteriorly diverging rows. In addition to these there are two pairs of spines behind the pore. Anterior to the genital pore there are two pairs of small spines, two pairs behind it and the pair of genital claws.

The female venter (fig. 8) has two pairs of simple spines anterior to coxae II with a third pair lying between coxae II ; posterior to coxae II there is a pair of small spines on the lateral edge of the body ; anterior to coxae III is a pair of long spines which are flanked laterally by a pair of small spines ; midway between coxae III and IV is a pair of long, simple spines. Tarsus II with a short claw ; tarsus III and IV each with a long claw.

Type host : A bat (*Tadarida mexicana* Saussure).

Type locality : Berkeley, California, U. S. A. October 12th, 1934.

Measurements : ♂ 0,51 mm. × 0,21 mm. ; ♀ 0,63 mm. × 0,21 mm.

Holotype and allotype slides in U. S. National Museum (N° 1283).

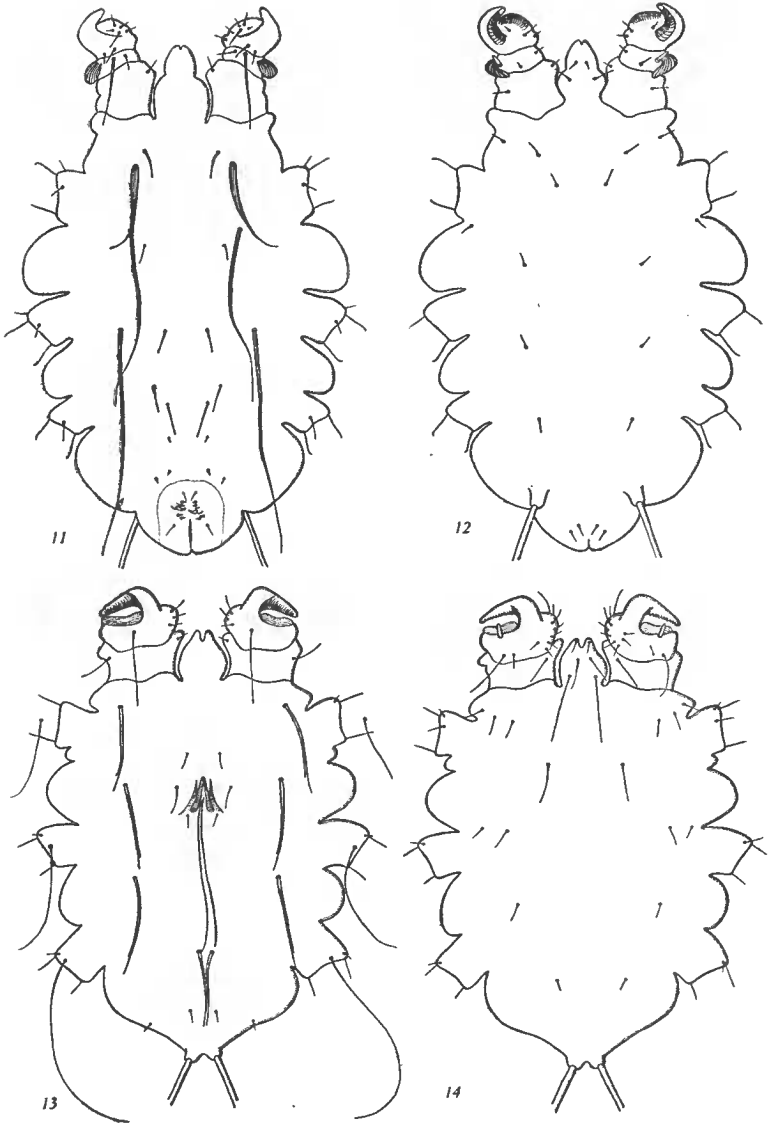
***Myobia simplex* Ewing, 1938.**

Myobia simplex Ewing, 1938, *Proc. ent. Soc. Wash.* 40 : 7, 196.

The male dorsum (fig. 9) has the lateral spines long, slender, not expanded or striated. Lateral spines I anterior to coxae II, extending to middle of coxae III ; lateral spines II level with posterior edge of coxae III, extending to middle of coxae IV ; lateral spines III below level of anterior edge of coxae III, extending beyond coxae IV to level of bases of terminal bristles. Sub-median spines I very minute, anterior to lateral spines I ; sub-median spines II and III posterior to genital pore, level with coxae III ; sub-median spines IV and V anterior to terminal bristles ; on the posterior edge of the body there is a pair of small spines. Genital pore between coxae III. Penis very stout and sinuous.

The male venter (fig. 10) has a pair of stout spines anterior to coxae II ; a pair of spines level with coxae II ; a pair of long spines level with anterior edge of coxae III ; posterior to coxae III is a pair of equally long spines. Tarsus II, III and IV each with a single claw.

The female dorsum (fig. 11) shows lateral spines I, II and III to be longitudinally striated. Lateral spines I placed anterior to coxae II extending to midway between coxae II and III ; lateral spines II narrower, lying posterior to coxae II and III ; lateral spines III narrower, lying posterior to coxae II, extending to middle of coxae IV ; lateral spines III level with coxae III, extending beyond posterior tip of body. Sub-median spines I stout, simple, lying anterior to lateral spines I ; sub-median spines II posterior to lateral spines II, short, simple ; sub-median spines III level with



Myobia simplex Ewing, 1938 ♀
FIG. 11, dorsum. — FIG. 12, venter.

Myobia stewardi sp. n. ♂
FIG. 13, dorsum. — FIG. 14, venter.

lateral spines III; sub-median spines IV and V lying between coxae IV, with three pairs of minute, almost imperceptible spines between them and genital pore. Anterior to the genital pore is a pair of simple spines; flanking the genital claws internally are two pairs of minute, cone-shaped spines with two pairs of cone-shaped spines behind the pore. Flanking the anus is a pair of simple spines.

The female venter (fig. 12) has two pairs of spines lying anterior to coxae II, with a third pair level with coxae II; posterior to coxae II is a pair of small spines on the lateral edge of the body; anterior to coxae III is a pair of small spines; posterior to coxae III is a pair of spines; level with posterior edge of coxae IV is a pair of spines; two pairs of spines are placed close to posterior tip of body.

Type host : Short tailed shrew (*Blarina brevicauda talpoides*).

Type locality : Smoky Mountains, Tennessee, U. S. A.

Measurements : ♀ 0,54 mm. × 0,29 mm.

Holotype female in the U. S. National Museum (N° 1284).

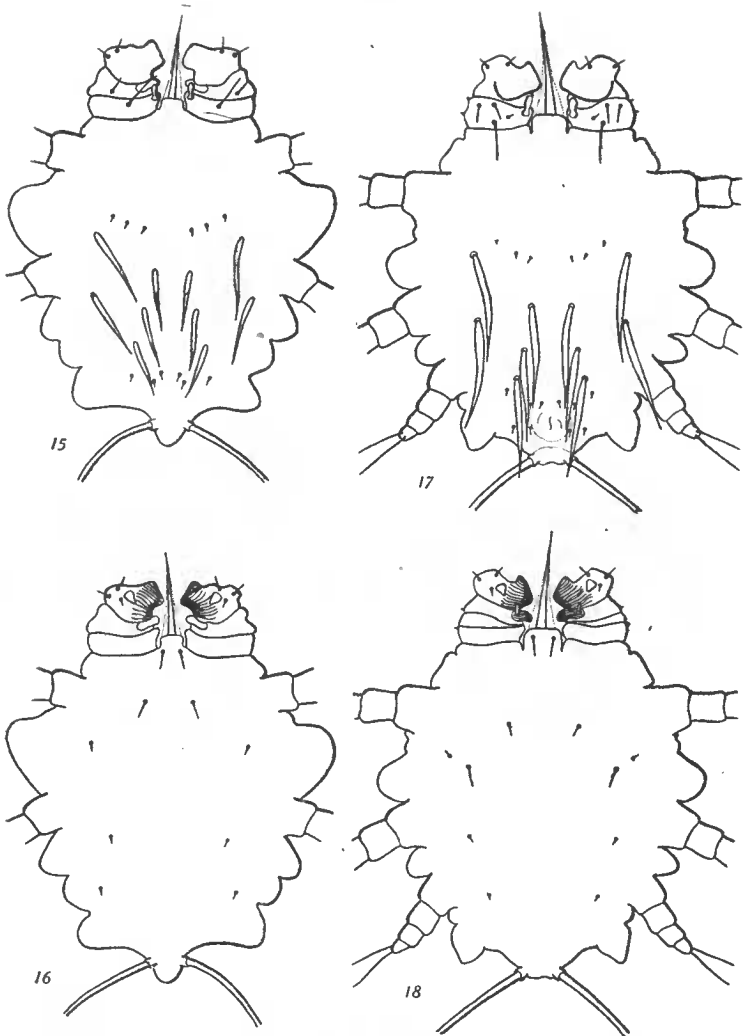
Remarks : EWING (1938) described only the female of this species, the male of which was then unknown. The description of the male is based on the specimen in the author's private collection, taken from the type host at Silverspring, Maryland, U. S. A., April 25 th, 1928.

***Myobia stewardi* sp. n.**

The male dorsum (fig. 13) has lateral spines I long, stout, barbed, placed anterior to coxae II; lateral spines II sub-similar, placed midway between coxae II and III; lateral spines III sub-similar, placed posterior to coxae III and extending to posterior edge of coxae IV. Sub-median spines I level with posterior edge of coxae II, short, simple; sub-median spines II midway between coxae II and III, long, simple. Median spine I long, stout, level with coxae IV, close to median line of body. Posterior to these there is a transverse row of four small spines. Genital pore placed midway between coxae II and III with a chitinized scutum surrounding it, and a pair of spines posterior to it. Penis long, stout, extending from median spines I to the genital pore.

The male venter (fig. 14) has three pairs of spines lying anterior to coxae II; posterior to coxae II is a pair of long spines; two pairs of spines are placed level with the posterior edge of coxae III; midway between coxae III and IV is a pair of spines; level with posterior edge of coxae IV is a pair of spines. Tarsus II with a short, stout claw; tarsus III and IV each with a long claw.

The larval dorsum (fig. 15) has two rows of three small spines midway between coxae II and III; anterior to coxae III is a pair of long, stout spines on the lateral edge of body with a pair of short, stout spines posterior to coxae III; level with coxae III is a pair of



Myobia stewardi sp. n.

FIG. 15, larval dorsum. — FIG. 16, id., venter. — FIG. 17, nymphal dorsum.
FIG. 18, id., venter.

sub-median spines ; sub-median spines II placed posterior to coxae III ; sub-median spines III situated further back, with six small spines close to posterior end of body.

The larval venter (fig. 16) shows the clasping organs on the first pair of legs and the arrangement of ventral spines. One pair on the

capitulum ; a pair of longer spines between coxae II ; a pair of small spines between coxae II and III and two pairs of short spines posterior to coxae III.

The dorsum of the nymph (fig. 17) shows the number and position of the large, expanded spines to be somewhat similar to those of the larva, but there is a greater number of spines on the first pair of legs.

Lateral spines I long, sword-shaped, placed midway between coxae II and III ; lateral spines II sword-shaped, longer than preceding spines, lying between coxae III. Anterior to lateral spines I is a row of six small spines. Sub-median spines I sword-shaped, level with coxae III ; sub-median spines II lying between coxae III and IV ; sub-median spines III level with coxae IV. Anterior to the genital pore are three pairs of small spines ; flanking the pore posteriorly are two pairs of spines.

The venter of the nymph (fig. 18) has a pair of spines anteriorly as in the larva ; posterior to coxae II is a pair of spines medially ; between coxae II and III are two pairs of spines, the median pair being the longer ; a pair of small spines lies between coxae III and a pair of spines are level with coxae IV. Tarsus II and III each have one claw ; tarsus IV is provided with only two very long, stout spines.

Type host : A rat (*Rattus rattus rufescens* Gray).

Type locality : Kangla Tongbi, Manipur State, India. July 27, 1945.

Measurements : ♀ 0,38 mm. × 0,22 mm.

Holotype male, larva and nymph in the author's private collection.

(*A suivre*).